

# NOMENCLATURE

**Connector** : The connector is an electrical connection assembly which consists of a receptacle and a mating plug, or a plug and a mating cable connecting plug.

**Receptacle** : The receptacle is that part of a connector which is normally fixed to a supporting surface. It has provision to couple with the plug, and contains an insert with pin or socket contacts.

**Plug** : The plug is that part of the connector which is normally removable. It is fitted to the free end of a cable or flexible conduit and contains an insert with pin or socket contacts.

**Cable Connecting Plug** : The cable connecting plug is that part of the connector which is normally fitted to the free end of a cable or flexible conduit. It has provision to couple with the plug.

The insert arrangements and contact sizes eliminate the possibility of mismatching.

## ELECTRICAL DATA

### "STANDARD" - "RAPID" AND "WEATHERPROOF" Series

#### CONTACT RESISTANCE BETWEEN PIN AND SOCKET

- (2 mm dia.) .079 dia. contacts : less than 0.0015 ohm
- (3 mm dia.) .118 dia. contacts : less than 0.0010 ohm
- (4 mm dia.) .157 dia. contacts : less than 0.0007 ohm

#### MAXIMUM CURRENT RATING

The maximum current rating will be determined in consideration of the number of contacts carrying the current, their diameters, and the temperature increase which is permissible.

The temperature increase  $\theta$  of a contact carrying  $I$  amperes is given in the adjoining table.

The total temperature increase (T) of a connector comprising :

- $n_1$  contacts carrying a current of  $I_1$  amperes,
  - $n_2$  contacts carrying a current of  $I_2$  amperes,
  - .....
- is, at maximum value :

$$T^{\circ}\text{C} = n_1 \theta_1 + n_2 \theta_2 + \dots$$

Current rating $I$ in amperes	Temperature Increase $\theta$		
	(2 mm) .179 dia. contact	(3 mm) .118 dia. contact	(4 mm) .157 dia. contact
<b>1</b>	(< 0.1 °C) < 0.18 °F	(< 0.1 °C) < 0.18 °F	(< 0.1 °C) < 0.18 °F
<b>4</b>	(< 1 °C) < 1.8 °F	(< 0.5 °C) < 0.9 °F	(< 0.5 °C) < 0.9 °F
<b>7</b>	(2 °C) 3.6 °F	(< 1 °C) < 1.8 °F	(< 1 °C) < 1.8 °F
<b>15</b>	(10 °C) 18 °F	(3 °C) 5.4 °F	(1.5 °C) 2.7 °F
<b>35</b>		(15 °C) 27 °F	(7.5 °C) 13.5 °F
<b>50</b>			(15 °C) 27 °F

#### VOLTAGE RATING (NF.L 54 125)

The permissible voltage will be determined in accordance with the following flashover voltage values :

- Flashover voltage between adjacent contacts is always more than 2,500 volts A.C. (rms) at a pressure of 1,013 millibars and at (20 °C) 68 °F [600 volts A.C. (rms) at (20,000 metres)] 21 880 yards.

In some applications and by an appropriate choice of contacts, higher voltage differences might be applied between contacts.

- Flashover voltage between contacts closest to shell and shell is always more than 1,500\* volts A.C. (rms) in the same pressure and temperature conditions [400 volts A.C. (rms) at (20,000 metres)] 21 880 yards.

\* More than 2,000 volts A.C. (rms) for connectors equipped with (4 mm dia.) .157 dia. contacts.

#### INSULATION RESISTANCE (Tested at 500 volts D.C.)

Not less than 5,000 megohms between one pin and all others connected to earth.

**Note** : The foregoing data can be guaranteed only if the necessary precautions have been taken on the assembling and soldering operations.

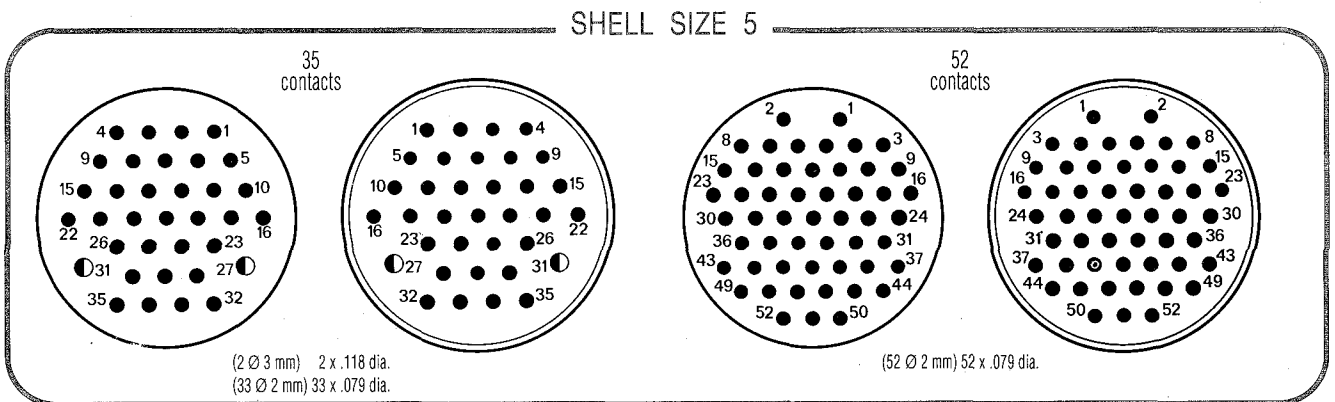
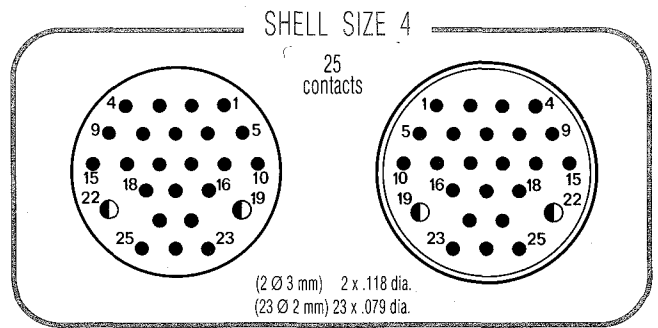
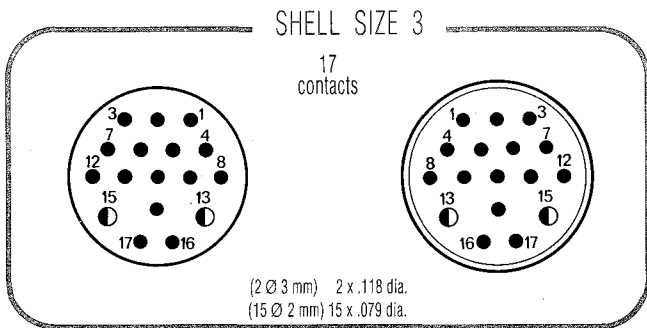
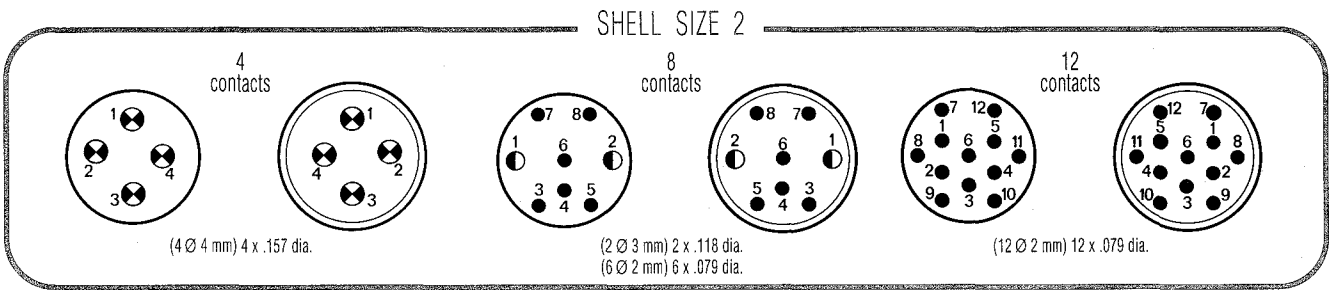
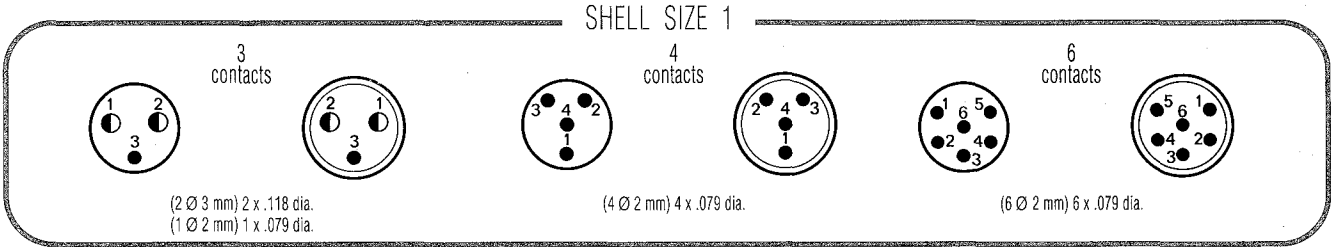
These values are given for standard atmospheric conditions (NF C20-700) International Specification : CEI 68-1.

- pressure : 760 mm Hg (1,013 mbar)
- temperature : (20 °C) 68 °F
- relative humidity : 65 %

# CONTACT ARRANGEMENT

"STANDARD" - "RAPID" and "WEATHERPROOF" series

Back face of inserts



- ( $\varnothing$  2 mm) .079 dia. contacts
- ( $\varnothing$  3 mm) .118 dia. contacts
- ⊗ ( $\varnothing$  4 mm) .157 dia. contacts

# MOUNTING DATA

## "STANDARD" - "RAPID" AND "WEATHERPROOF" Series

Both front and back of plug and receptacle inserts have numbers for **easy contact identification**.

**Solder assembly of the wires** to the contacts (after removal of the plug shells).

(2 mm) .079 dia. contacts - well size : (1.50 mm) .059 dia. - Max. wire cross section area : (1.34 sq. mm) 16 AWG

(3 mm) .118 dia. contacts - well size : (2.30 mm) .090 dia. - Max. wire cross section area : (3.39 sq. mm) 12 AWG

(4 mm) .157 dia. contacts - well size : (3.90 mm) .154 dia. - Max. wire cross section area : (6 sq. mm) 10 AWG

### CAUTION

- Use no acid for stripping.
- Thoroughly clean contacts after soldering using a brush dipped in a suitable solvent.
- Ensure that the solder has not overflowed.
- Place a length of sleeving over the soldered connection.

**Receptacle mounting** : either from the front of the unit box, or from the rear (with the threaded barrel only protruding). In both cases, the wall cut-out is identical. In the latter case, the maximum wall thickness should not exceed (4 mm) .157 and the receptacles should be secured with countersunk head screws.

**Accessories** : All the plugs available in the "Standard" and "Rapid" series have three separate identical cable entries which may be used simultaneously. These entries are splayed to facilitate cable convergence and each can receive one bushing, cable clamp or adapter for flexible conduit. Unused entries are sealed with blanking plates supplied with the plug.

Threaded protection caps can be supplied to protect unused plugs and receptacles.

## APPLICABLE SPECIFICATIONS

The JAEGER electrical connectors meet the requirements of the following specifications :

### - French Specifications

AIR : 8464 - 511 - 520 - 521 - 711 - 712 - 713 - 715 - 763  
 NF.C 20-700. International Specification : CEI 68-1  
 STCAN : 543 558

### - U.S. Specifications

MIL - C - 5015

## NATO CODE NUMBERS

Part No.	NATO Code No.	Part No.	NATO Code No.	Part No.	NATO Code No.
<b>0383 220</b> 06	5935-14-2180897	<b>5320 080</b> 06	5935-14-2574491	<b>5329 980</b> 06	5975-14-2561071
<b>0383 510</b> 06	5935-14-2180899	<b>5320 120</b> 06	5935-14-2325586	<b>5332 330</b> 06	5935-14-2359207
<b>0383 550</b> 06	5935-14-2147628	<b>5320 800</b> 06	8030-14-2702113	<b>5360 030</b> 06	5935-14-2247969
<b>0383 560</b> 06	5935-14-2186681	<b>5321 040</b> 06	5935-14-2729213	<b>5360 040</b> 06	5935-14-2325579
<b>0383 590</b> 06	5935-14-2180901	<b>5322 120</b> 06	5935-14-2809058	<b>5360 060</b> 06	5935-14-2325580
<b>0383 820</b> 06	5935-14-2169978	<b>5322 250</b> 06	5935-14-2359578	<b>5360 080</b> 06	5935-14-2574806
<b>0425 470</b> 06	5935-14-2146986	<b>5323 530</b> 06	5935-14-2385088	<b>5360 120</b> 06	5935-14-2325581
<b>0429 370</b> 06	5935-14-2167199	<b>5323 580</b> 06	5935-14-2385089	<b>5363 580</b> 06	5935-14-2798979
<b>0429 400</b> 06	5935-14-2167198	<b>5324 010</b> 06	5935-14-2796643	<b>5366 030</b> 06	5935-14-2848890
<b>0429 430</b> 06	5935-14-2167197	<b>5324 150</b> 06	5935-14-2729214	<b>5366 040</b> 06	5935-14-2729216
<b>0429 530</b> 06	5935-14-2169981	<b>5324 170</b> 06	5935-14-2566410	<b>5366 060</b> 06	5935-14-2247970
<b>0429 540</b> 06	5935-14-2169980	<b>5324 230</b> 06	5935-14-2790506	<b>5366 080</b> 06	5935-14-2515627
<b>0429 550</b> 06	5935-14-2146117	<b>5324 320</b> 06	5935-14-2729215	<b>5366 120</b> 06	5935-14-2515608
<b>0429 560</b> 06	5935-14-2146119	<b>5324 770</b> 06	5935-14-2566411	<b>5366 170</b> 06	5935-14-2823355
<b>0429 770</b> 06	5935-14-2169979	<b>5326 060</b> 06	5935-14-2539580	<b>5366 250</b> 06	5935-14-2539581
<b>0429 860</b> 06	5935-14-2180898	<b>5326 080</b> 06	5935-14-2515626	<b>5366 350</b> 06	5935-14-2793635
<b>0429 900</b> 06	5935-14-2169977	<b>5326 120</b> 06	5935-14-2515609	<b>5369 100</b> 06	5935-14-2368308
<b>0430 010</b> 06	5935-14-2180900	<b>5326 170</b> 06	5935-14-2823354	<b>5369 110</b> 06	5935-14-2637131
<b>0430 820</b> 06	5935-14-2180896	<b>5326 250</b> 06	5935-14-2539579	<b>5369 120</b> 06	5935-14-2637129
<b>0430 850</b> 06	5935-14-2146118	<b>5326 560</b> 06	5935-14-2589655	<b>5369 130</b> 06	5935-14-2539914
<b>5304 950</b> 06	3040-14-3034044	<b>5328 940</b> 06	5935-14-2823356	<b>5369 140</b> 06	5935-14-2637130
<b>5305 020</b> 06	5935-14-2325584	<b>5329 000</b> 06	5935-14-2147383	<b>5369 350</b> 06	5935-14-2642162
<b>5320 030</b> 06	5935-14-2247967	<b>5329 400</b> 06	5935-14-2212031	<b>5369 450</b> 06	5330-14-2589344
<b>5320 040</b> 06	5935-14-2325582	<b>5329 600</b> 06	5935-14-2468751	<b>5369 460</b> 06	5330-14-2729212
<b>5320 060</b> 06	5935-14-2325583	<b>5329 700</b> 06	5970-14-2800466	<b>5971 040</b> 06	5120-14-2478227

**NOTE** : This list cannot be revised regularly. For information on the new numbers assigned, please consult our Sales Engineering Office.